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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/033,437 | 12/28/2001 | Keith A. Riha | TRM TR000024 DIV | 9561 |
| 32047 | 7590 | 06/14/2005 | EXAMINER | |
| GROSSMAN, TUCKER, PERREAULT & PFLEGER, PLLC 55 SOUTH COMMERCIAL STREET MANCHESTER, NH 03101 | | | STAIKOVICI, STEFAN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1732 | |

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/033,437

Applicant(s)

RIHA ET AL.

Examiner

Stefan Staicovici

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/3/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 2, 2005 has been entered.

Response to Amendment

2. Applicants' amendment filed May 2, 2005 has been entered. Claim 1 has been amended. No claims have been canceled. No claims have been added. Claim 1 is pending in the instant application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Filion *et al.* (US Patent No. 5,952,630) in view of Feng *et al.* (US Patent No. 6,627,299 B1).

Filion *et al.* ('630) teach the basic claimed process including, providing a flexible (deformable) thermoplastic PVC (polymer) outer skin (26b') (see col. 3, line 63) formed by vacuum forming (thermoforming) (col. 5, lines 56-57), a foam layer (26b'') bonded to said skin, a substrate layer (22b) bonded to said foam layer (26b'') and at least one switch (30b) embedded in said foam layer (26b'') that is force activated (see Figure 5 and, col. 3, lines 60-64; col. 5, lines 31-34 and lines 54-61; col.6, lines 20-21). Further, Filion *et al.* ('630) specifically teach that *any* (emphasis added) suitable foam material may be used as taught in U.S. Patent No. 5,232,957, which is incorporated by reference (col. 6, lines 1-7), and as such, under MPEP §2163.07, Filion *et al.* ('630) teach a polyurethane foam. Furthermore, Filion *et al.* ('630) teach marking of said outer skin layer (see Figure 1).

Regarding claim 1, although Filion *et al.* ('630) teaches marking of said outer skin layer (see Figure 1), Filion *et al.* ('630) do not teach a process of marking said outer skin layer using a laser. However, laser marking a thermoplastic material is well known as evidenced by Feng *et al.* ('299) who teach in general using a laser beam to form a light, dark or colored laser mark on a thermoplastic material, such as PVC (see col. 1, lines 38-41) and specifically, forming a dark mark on a lighter background or a light mark on a dark background (see col.1, lines 10-58). Therefore, it would have been obvious for one of ordinary skill in the art to have used a laser beam as taught by Feng *et al.* ('299) to mark the PVC material in the process of Filion *et al.* ('630) because, Feng *et al.* ('299) teach that laser marking is well known for quickly and cleanly

inscribe thermoplastic materials such as PVC which is the thermoplastic material of Fillion *et al.* ('630), hence providing for an improved process.

Response to Arguments

5. Applicant's arguments filed May 2, 2005 have been considered but are moot in view of the new ground(s) of rejection as shown above.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Staicovici, Ph.D. whose telephone number is (571) 272-1208. The examiner can normally be reached on Monday-Friday 9:30 AM to 6:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Colaianni, can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stefan Staicovici, PhD


Primary Examiner

6/9/05

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June 9, 2005